

Abstract of the Disclosure

A method is disclosed in which the principle of phase-coupling is used to stabilize the polarization of laser radiation emitted by a plurality of phase-coupled vertical cavity surface emitting laser elements. Due to a suitable coupling strength between adjacent VCSEL elements, the probability of polarization flips of VCSEL devices operated in the single mode region is zero or at least drastically reduced. Moreover, a VCSEL device is disclosed, comprising a polarization adjusting means for controlling the polarization direction of an arrangement of a plurality of phase-coupled VCSEL elements, wherein the polarization direction of each VCSEL element is substantially kept constant.

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